Application No. 10/594,977

Art Unit: 1796

## **AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions of claims in the application.

## **Listing of Claims**

Claim 1 (Canceled)

Claim 2 (Currently amended): <u>A method for producing a fluorine-containing</u> (meth)acrylate polymer comprising:

reacting a (meth)acrylate polymer with an alcohol containing a fluorine atom represented by General Formula 1:

 $R_{f}(CH_{2})_{n}OH \tag{1}$ 

wherein  $R_f$  is a fluoroalkyl group or a fluoroalkyl ether group of 1 to 15 carbon atoms containing at least one or more fluorine atoms and n is an integer of 0 to 10,

The method for producing a fluorine-containing (meth)acrylate polymer according to Claim 1, wherein the reaction is conducted in the presence of a transesterification catalyst.

Claim 3 (Original): The method for producing a fluorine-containing (meth)acrylate polymer according to Claim 2, employing a transesterification catalyst consisting of at least one selected from alkaline metal carbonates, alkaline earth metal carbonates, alkaline metal bicarbonates and alkaline metal hydroxides as a transesterification catalyst.

Claim 4 (Original): The method for producing a fluorine-containing (meth)acrylate polymer according to Claim 2, employing a transesterification catalyst consisting of at least one selected from Lewis acids and protic acids as a transesterification catalyst.

Claim 5 (Original): The method for producing a fluorine-containing (meth)acrylate polymer according to Claim 4, employing a transesterification catalyst consisting of at least one selected from vanadium-based compounds, titanium-based compounds, zirconium-based compounds and hafnium-based compounds as a Lewis acid.

Claim 6 (Original): The method for producing a fluorine-containing (meth)acrylate polymer according to Claim 5, employing a transesterification catalyst consisting of at least one selected from vanadium chloride-based compounds, titanium chloride-based compounds, zirconium chloride-based compounds and hafnium chloride-based compounds as a Lewis acid.

Claim 7 (Original): The method for producing a fluorine-containing (meth)acrylate polymer according to Claim 6, employing titanium tetrachloride as a Lewis acid.

Claim 8 (Original): The method for producing a fluorine-containing (meth)acrylate polymer according to Claim 5, employing a transesterification catalyst consisting of at least one selected from acetylacetonato complexes of vanadium-based compounds, titanium-based

compounds, zirconium-based compounds and hafnium-based compounds as a transesterification catalyst.

Claim 9 (Original): The method for producing a fluorine-containing (meth)acrylate polymer according to Claim 5, employing a transesterification catalyst consisting of at least one selected from tetrahydroxyfuran complexes of vanadium chloride-based compounds, titanium chloride-based compounds, zirconium chloride-based compounds and hafnium chloride-based compounds as a transesterification catalyst.

Claim 10 (Original): The method for producing a fluorine-containing (meth)acrylate polymer according to Claim 5, employing a transesterification catalyst consisting of at least one selected from alkoxides of vanadium-based compounds, titanium-based compounds, zirconium-based compounds and hafnium-based compounds as a transesterification catalyst.

Claim 11 (Original): The method for producing a fluorine-containing (meth)acrylate polymer according to Claim 5, employing a transesterification catalyst consisting of at least one selected from fluorine-containing alkoxides of vanadium-based compounds, titanium-based compounds, zirconium-based compounds and hafnium-based compounds as a transesterification catalyst.

Amendment under 37 C.F.R. §1.111 Attorney Docket No. 063136

Application No. 10/594,977

Art Unit: 1796

Claim 12 (Currently amended): The method for producing a fluorine-containing (meth)acrylate polymer according to any of Claims 2 [[1]] to 11, employing an organic solvent containing a fluorine atom as a non-reactive solvent.

Claims 13 and 14 (Canceled)